

## PULL SYSTEM IMPROVEMENTS INCREASE SPEED AND QUALITY

**ABOUT ELECTRONIC SYSTEMS INC.** Headquartered in Sioux Falls, South Dakota, Electronic Systems, Inc. (ESI) provides a full range of electronic manufacturing services (EMS) to original equipment manufacturers in the industrial, commercial, medical, energy and HVAC markets. The company employs Lean principles and invests in the latest technology to deliver high quality products, from printed circuit board assembly to full system integration. Beginning in 1980 with just a handful of employees, ESI now has over two hundred team members across three facilities. The company uses automation to leverage the current workforce while enhancing capabilities and services.

**THE CHALLENGE.** Always looking for ways to improve ESI's responsiveness, company leaders were interested in exploring the capabilities of their pull system. They reach out to South Dakota Manufacturing & Technology Solutions (SDMTS), part of the MEP National Network, for insight into applications they could use to improve the current process.

**MEP CENTER'S ROLE.** A business advisor from SDMTS worked with team members at ESI to review the pull system and look for new ways reduce lead-time and improve efficiency. A cross-functional team reviewed the manufacturing process for a single product, identifying several areas for improvement. SDMTS assisted with planning and implementing the revised pull system and provided ongoing Lean coaching to ESI. The resulting procedure reduced cycle time for the product by nearly half and increased quality (as measured by FPY) by 15 percent.

ESI applied components of the process to other comparable product lines to achieve similar outcomes. The company has continued to work with SDMTS, using their expertise for Lean certification training and various other projects. ESI's commitment to customer service and Lean culture shines bright. For the third year in a row, ESI has won a Circuits Assembly Service Excellence Award for Highest Customer Ratings of EMS companies in their revenue division. It's clear to see the company's dedication to quality, timeliness, and dependability in the work that they do.

"The knowledge and training that SDMTS offers has truly helped ESI to secure a Lean culture, which has had a great impact on the company's growth and ability to meet the ever changing needs of our customers."

-Fred Ledwell, Director of Manufacturing

## RESULTS



Reduced cycle time by nearly  
**50%**



Increased quality by **15%**



Won Circuits Assembly  
Service Excellence Awards for  
Highest Customer Ratings

## CONTACT US



2329 N. Career Avenue  
Suite 106  
Sioux Falls, SD 57107



(605)367-5757



[www.sdmanufacturing.com](http://www.sdmanufacturing.com)

